Application No. 10/802,784

Reply to Office Action of August 21, 2006

## IN THE CLAIMS

Please amend the claims as follows:

Claims 1-2 (Canceled).

Claim 3 (Currently Amended): An information reproducing method for reproducing a representative picture recorded on an information disc, said information recording disc including,

a managing file in which management information is stored, and an A/V file in which at least one of audio and video information is stored,

at least one object is recorded in said A/V file, said at least one object including object units, each of said object units including at least one of a video pack in which video data is recorded and an audio pack in which audio data is recorded,

said management information includes original program chain information including cell information representing at least one cell, and a video manager information table including disc representative picture information for a disc representative picture,

said video manager information table is provided in another hierarchically preceding area relative to said original program chain information and includes a start address of said original program chain information,

said original program chain information designates respective cell reproduction orders, said at least one cell refers to at least a part of whole of said at least one object,

said disc representative picture information includes information regarding a program chain number, a cell number, a picture point as a presentation time of a picture representing recording contents of the disc, and information regarding a time when the disc representative picture information was made, and

said disc representative picture is a picture existing in a cell identified by said cell number,

the information reproducing method comprising:
reading said management information;

referring to said disc representative picture information;

determining a position of said disk representative picture in said video file; and decoding said disk representative picture.

Claim 4 (Currently Amended): An information reproducing apparatus reproducing a representative picture recorded on an information disc, said information recording disc including,

a managing file in which management information is stored, and an A/V file in which at least one of audio and video information is stored,

at least one object is recorded in said A/V file, said at least one object including object units, each of said object units including at least one of a video pack in which video data is recorded and an audio pack in which audio data is recorded,

said management information includes original program chain information including cell information representing at least one cell, and a video manager information table including disc representative picture information for a disc representative picture,

said video manager information table is provided in another hierarchically preceding area relative to said original program chain information and includes a start address of said original program chain information,

said original program chain information designates respective cell reproduction orders, said at least one cell refers to at least a part of whole of said at least one object,

said disc representative picture information includes information regarding a program chain number, a cell number, a picture point as a presentation time of a picture representing recording contents of the disc, and information regarding a time when the disc representative picture <u>information</u> was made, and

said disc representative picture is a picture existing in a cell identified by said cell number,

the information reproducing apparatus comprising:

reproducer for reproducing said management information, for referring to said disc representative picture information, and for determining a position of said disk representative picture in said video file; and

a decoder for decoding said disc representative picture.

Claim 5 (Currently Amended): An information recording method for recording a representative picture on an information disc, said information recording disc including,

a managing file in which management information is stored, and

an A/V file in which at least one of audio and video information is stored,

at least one object is recorded in said A/V file, said at least one object including object units, each of said object units including at least one of a video pack in which video data is recorded and an audio pack in which audio data is recorded,

said management information includes original program chain information including cell information representing at least one cell, and a video manager information table including disc representative picture information for a disc representative picture,

said video manager information table is provided in another hierarchically preceding area relative to said original program chain information and includes a start address of said original program chain information,

said original program chain information designates respective cell reproduction orders, said at least one cell refers to at least a part of whole of said at least at least one object,

said disc representative picture information includes information regarding a program chain number, a cell number, a picture point as a presentation time of a picture representing recording contents of the disc, and information regarding a time when the disc representative picture information, was made and

said disc representative picture is a picture existing in a cell identified by said cell number,

the information recording method comprising:

determining a position of said disc representative picture in said video file;

generating said disc representative picture information; and

recording said management information including said disc representative picture information.

Claim 6 (Currently Amended): An information recording apparatus for recording a representative picture on an information disc, said information recording disc including, a managing file in which management information is stored, and an A/V file in which at least one of audio and video information is stored, at least one object is recorded in said A/V file, said at least one object including object units, each of said object units including at least one of a video pack in which video data is recorded and an audio pack in which audio data is recorded,

said management information includes original program chain information including cell information representing at least one cell, and a video manager information table including disc representative picture information for a disc representative picture,

said video manager information table is provided in another hierarchically preceding area relative to said original program chain information and includes a start address of said original program chain information,

said original program chain information designates respective cell reproduction orders, said at least one cell refers to at least a part of whole of said at least one object

said disc representative picture information includes information regarding a program chain number, a cell number, a picture point as a presentation time of a picture representing recording contents of the disc, and information regarding a time when the disc representative picture <u>information</u> was made, and

said disc representative picture is a picture existing in a cell identified by said cell number,

the information recording apparatus comprising:

a first processor-for determining a position of said-disc representative picture in said video file, and for generating said disc representative picture information; and

a second processor for recording said management information including said disc representative picture information.

Claim 7 (Currently Amended). An information recording disc configured to have data recorded thereon and data reproduced therefrom by an information recording/reproducing apparatus, the disc comprising:

a managing file in which management information is stored, and

an A/V file in which at least one of audio and video information is stored,

at least one object is recorded in said A/V file, said at least one object including object units, each of said object units including at least one of a video pack in which video data is recorded and an audio pack in which audio data is recorded,

said management information includes original program chain information including cell information representing at least one cell, and a video manager information table including disc representative picture information for a disc representative picture,

said video manager information table is provided in another hierarchically preceding area relative to said original program chain information and includes a start address of said original program chain information,

said original program chain information designates respective cell reproduction orders, said at least one cell refers to at least a part of whole of said at least one object,

said disc representative picture information includes information regarding a program chain number, a cell number, a picture point as a presentation time of a picture representing recording contents of the disc, and information regarding a time when the disc representative picture <u>information</u> was made, and

said disc representative picture is a picture existing in a cell identified by said cell number,

wherein the management information is provided to control recording, playing back, or editing the A/V file by the information recording/reproducing apparatus, the A/V file is accessed according to the management information.